

Characteristics and Attitudes of Pre-Service Teachers toward Individuals with Mental Illness

Mickey Losinski¹* John W. Maag² Antonis Katsiyannis³
1.Department of Special Education Counseling and Student Affairs, Kansas State University, Manhattan, KS 66506

2.Department of Special Education, University of Nebraska-Lincoln, Lincoln, NE 68583-0732 3.Department of Curriculum and Instruction, Clemson University, Clemson, SC 29634 *E-mail of the corresponding author:mlosins@k-State.edu

Abstract

Mental health in children and adults has always been a controversial topic, however, recent mass shootings in schools have heightened the concern of many and raise questions for how to interact with the mentally ill. Schools, have the capacity to be one of the key stakeholders in delivering services to students with mental health concerns, therefore it is critical to understand the dispositions of teachers toward these students to ensure that they understand the needs of these students. The purpose of this study is to examine specific characteristic of preservice teachers' attitudes towards individuals with mental illnesses. The study sample consisted of 173 preservice teachers enrolled in a four-year teacher education program at a public research university located in the southeastern United States. Results indicated that four demographic variables contributed to preservice teacher's attitudes on the Community Attitudes toward Mental Illness (CAMI) measure and its various subscales: political orientation, knowing someone with a mental illness, and believing ADHD and ASD were mental illnesses. Implications for future research are discussed.

Keywords: Mental health, teacher preparation, emotional disturbance, EBD

1. Introduction

There has been a growing body of information on mental illness that has been exposed to the public during the past several decades. This information has focused on symptoms, biochemical and genetic causes, and that mental illnesses are diseases no different from other physical conditions and, consequently, are responsive to effective medical treatment (Schomerus et al., 2012). The idea was to change negative perceptions the public had regarding mental illness. During the 1990s and early 2000s, the National Alliance on Mental Illness (NAMI) launched several anti-stigma programs aimed at diminishing society's negative stereotypes and, thereby, improving social acceptance of people with mental illness. In a comprehensive and systematic meta-analytic review of research on attitudes toward individuals with mental illness over the last decade, Schomerus et al. (2012) found that although public knowledge about mental illness has increased but that attitudes toward persons with mental illness have not changed and even deteriorated toward persons with schizophrenia.

Several studies have been conducted to determine salient characteristics related to public attitudes towards mental illness. For example, Addison and Thorpe (2004) conducted a study with 169 university students: graduate counseling majors and undergraduate psychology and law majors. Understandably, they found that graduate counseling students obtained more accurate overall knowledge scores on the *Community Attitudes Toward the Mentally Ill* scale (CAMI; Taylor & Dear, 1981) than the other two groups of undergraduate students. In addition, higher knowledge scores were predictive of more positive attitude scores. Finally, students with experience with individuals with mental illness were more positive than participants who did not have experience with someone with mental illness. In a study of 500 psychiatric and general ward attendants, Vibha, Saddichha, and Kumar (2008) found that psychiatric attendants had more positive attitudes toward individuals with mental illness than general ward attendants. They also found that, regardless of group, age, duration of contact, and educational background predicted attitudes towards individuals with mental illness. Specifically, younger participants, those who had the greatest contact with individuals with mental illness, and those with greater education had the most positive attitudes. Other researchers have also found that higher levels of education, age, and occupation contribute to more positive attitudes towards individuals with mental illness (Caldwell & Jorm, 2000; Nordt, Rossler, & Lauber, 2006; Yang, 1989).

Various groups have served as participants for studies on community attitudes towards individuals with mental illness: undergraduate psychology and law students, nursing students, medical students, graduate counseling students, nurses, psychiatrists, and hospital ward attendants as well as the general public (e.g., Addison & Thorpe, 2004; Caldwekk & Jorm, 2000; Nordt et al., 2006; Vibha et al., 2008; Yang, 1989). However, no study to date has investigated teachers' attitudes toward individuals with mental illness. It is important to address this omission. First, there is a growing number of incidents of school violence perpetrated by individuals with mental illness—including youngsters who may attend the school (Algozzine & McGee, 2011; Eisenbraun, 2007). Second, there is a growing realization of the importance of schools for addressing students



with mental illness. For example, of the children and youth with mental illnesses needs who receive services do so through school-based resources and referrals (Green, McLaughlin, Alegria et al., 2013). Consequently, various governmental organizations (e.g., the President's New Freedom Commission on Mental Health) and researchers (e.g., Forness, 2003, Maag & Katsiyannis, 2010) have called on schools and teachers to expand their role with regard to early identification, intervention, and referral of children who may experience mental health issues. This focus is especially important for children with emotional and behavioral disorders (EBD) who have severe levels of mental illness but, as a group, as traditionally been underserved in schools (Forness, Freeman, Paparella, Kauffman, & Walker, 2012; Kauffman, Mock, & Simpson, 2007).

Given the pervasiveness of the stigma that continues to exist and the pivotal role of teachers regarding early identification and treatment support, the purpose of the current study was to examine the knowledge and attitudes of pre-service teachers toward individuals with mental illness with a particular emphasis on variables that may contribute to pre-service teachers' attitudes and knowledge toward mental illness. The reason for targeting pre-service versus practicing teachers is that the former may be more amenable to changing negative attitudes while they are still in school while the possibility of being exposed to courses that could positively impact these attitudes exists. For example, Holmes, Corrigan, Williams, Canar, and Kubiak (1999) found that adults' attitudes toward mental illness after taking a community college course in "Severe Mental Illness" or "General Psychology" improved in the areas of benevolence and social restriction towards mental illness.

The specific variables investigated included age, gender, ethnicity, contact with a person with mental illness, political beliefs, and major area in education across scales and total score on the CAMI. The attitudes of this group towards mental illness has not previously been investigated. The advantage of surveying preservice teachers versus practicing teachers is that researchers have found that some college courses can positively impact individuals' attitudes towards individuals with mental illness (e.g., Holmes et al.,1999).

2. Method

2.1 Participants and Setting

The study sample consisted of 173 preservice general education (N = 94) and special education majors (N = 6), and education minors (N = 67)—78% of which were female and 22% were male—enrolled in four-year teacher education program at a public research university located in the southeastern United States. The majority of participants were Caucasian (90%) with 6% African American, and an additional 4% other ethnicities. The majority of participants were sophomores (N = 69), followed by juniors (N = 46), freshman (N = 37), seniors (N = 13), and graduate students (N = 2). Participants' mean age was 20.18 years. Participants were enrolled in either an introduction to education or introduction to special education course as required by their respective teacher preparation programs. Both programs were accredited by the National Council for Accreditation of Teacher Education (NCATE) and led to a Bachelor's degree and state teaching licensure.

2.2 Instruments

A demographic questionnaire was developed that asked participants for details of gender, age, ethnicity, major, political ideology (i.e., very conservative to very liberal), if they knew someone with a mental illness (e.g., family member, relative, friend, acquaintance), and beliefs about what they consider a mental illness selected from a list that included the following terms: Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorder (ASD), Anxiety, Bipolar Disorder, Depression, Emotional Disturbance, Obsessive Compulsive Disorder (OCD), and Schizophrenia.

In order to assess participants' perceptions of mental illness, the Community Attitudes Toward the Mentally Ill (CAMI) scale was used. First developed by Taylor and Dear (1981), the CAMI consists of 40 statements that are rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) on four attitude factors: (1) Authoritarianism (viewing the mentally ill as an inferior class needing coercive treatment), (2) Benevolence (viewing the mentally ill in a sympathetic way based on humanistic and religions principles), (3) Social Restrictiveness (viewing the mentally ill as a threat to society), and (4) Community Mental Health Ideology (valuing the therapeutic benefit of community and acceptance of de-institutionalized care).

In their initial investigation of the CAMI, Taylor and Dear (1981) demonstrated that the measure had adequate reliability and validity. The original scale exhibited adequate internal reliability with the following Cronbach's coefficient alphas for each factor: authoritarianism ($\alpha = 0.68$), benevolence ($\alpha = 0.76$), ideology ($\alpha = 0.88$), and social restrictiveness ($\alpha = 0.80$). With regard to validity, Taylor and Dear generated items for the CAMI through a procedure including a review of the literature, using existing validated surveys (Opinions about Mental Illness, Community Mental Health Ideology), and through factor analysis that identified the four factors described above. However, other researchers have found a three factor solution (Wolff, Pathare, Craig, & Leff, 1996; Barney et al., 2010).



2.3 Procedure

The CAMI scale and demographic questionnaire were administered during the first three weeks of the spring 2013 semester and took participants approximately 15 minutes to complete. During each administration, students were given a general description of the nature of the survey and instructed that participation was strictly voluntary. Those who agreed to participate signed a participant consent form prior to the administration and were assigned a study number to maintain their anonymity.

2.4 Research Design and Analysis

All data entry and statistical tests were completed using IBM SPSS v.20 software. Mean ratings of the CAMI and its four subscales (authoritarianism, benevolence, ideology, and social restrictiveness) served as the unit of analysis. Because each measure included equal numbers of positively and negatively worded items, after data were entered into the database, negatively worded items were transposed so that all items reflected answers to positive statements (i.e. 1=5, 2=4, 3=3, 4=2, 5=1). Data from the CAMI and each subscale were then transposed to allow the total score for each subscale to reflect a tolerant attitude toward the subscale (e.g., a large number on the authoritarianism subscale suggests the participant does not agree with a more authoritarian approach to dealing with individuals with mental illness). Reliability of each scale was then calculated using Cronbach's coefficient Alpha and compared to findings from Taylor and Dear (1981). To determine possible influences on pre-service teachers' attitudes toward individuals with mental illness, stepwise regressions were performed for each subscale to identify the extent to which certain demographic variables may have predicted scores on the CAMI and its subscales. An alpha level of 0.05 was used to determine statistical significance for all analyses.

3. Results

Reliability of the subscales of the CAMI were assessed prior to all other analyses using Chronbach's Alpha coefficient: Authoritarianism = .669 (n = 10), Benevolence = .696 (n = 10), Ideology = .874 (n = 10), and Social Restrictiveness = .826 (n = 10). All alphas were above 0.60, which is considered satisfactory and consistent with the coefficients originally obtained by Taylor and Dear (1981).

3.1 Descriptive Results

Almost 75% of participants indicated they knew someone with a mental illness. In addition, approximately 70% of participants either had a family member, relative friend, or acquaintance with mental illness. In terms of the category of conditions,

Of the disability categories listed, Schizophrenia (97.0%) and Bipolar Disorder (94.0%) were most consistently considered as a mental illness by participants. At the other end of the spectrum, only 32.3% identified Attention Deficit Hyperactivity Disorder (ADHD) a mental illness. Furthermore, participants considered Autism Spectrum Disorders (ASD) a mental illness at the same rate as Major Depression (73.1%) and higher than Obsessive Compulsive Disorder (64.1%), Emotional Disturbance (61.1%), and Anxiety Disorders (59.3%).

In terms of CAMI scores, participants overall agreed with a more tolerant approach to dealing with individuals with mental illness with mean scores on the total CAMI of 148 (SD = 16.26) (i.e., 28 points above the neutral score of 120). In addition, subscale scores were all above neutral (i.e., neutral = 30): Authoritarianism (34.38, SD = 4.03), Benevolence (39.13, SD = 3.54), Ideology (36.35, SD = 6.56), and Social Restrictiveness (37.91, SD = 5.31).

3.2 Predictors of Attitudes Toward Individuals with Mental Illness

Three variables—political orientation, belief that ADHD is a mental illness, and knowing someone with a mental illness—were statistically significant predictors of participants' attitudes toward individuals with mental illness. At step one of the stepwise regression, four variables were identified as significant predictor of CAMI scores: political orientation (F[1, 171] = 21.249, p < .0001) accounted for 11.1% of the variance, belief that ADHD is a mental illness (F[1, 170] = 17.033, p = <.0001) accounted for 8.1% of the variance, belief that autism spectrum disorders are a mental illness (F[1, 170] = 8.143, p = .005) accounted for 4.1% of the variance, and knowing someone with a mental illness (F[1, 169] = 4.708, p = .031) accounted for 2.2% of the variance. Specifically, participants with more liberal political views were more tolerant of individuals with mental illness as were those who believed ADHD and autism spectrum disorders are a mental illness, and knew someone with a mental illness.

Table 1 displays results of the stepwise regressions for each of the subscales of the CAMI with political orientation and belief that ADHD is a mental illness significantly predicting scores on all subscales. As can be seen, political orientation, considering ADHD as a mental illness, and knowing someone with mental illness predicted overall CAMI scores. Political orientation and believing ADHD is a mental illness also were significant predictors for all subscale scores. On the benevolence subscale knowing someone with a mental



illness was significant as was believing autism spectrum disorders are a mental illness for the ideology subscale.

Table 1. Significant results of stepwise regression analysis for total CAMI and subscale scores.

	R	R^2	В	F Change	Sig.
CAMI-Total	_	_	125.736	_	.000
Political Orientation	.332	.111	5.562	21.249	.000
ADHD	.438	.192	8.456	20.137	.001
Know Someone	.462	.213	6.079	15.287	.031
with Mental Illness	.402	.213	0.079	13.207	.031
Authoritarianism	_	-	30.557	-	.000
Political Orientation	.263	.069	1.174	12.736	.001
ADHD	.362	.131	2.184	12.144	.001
Benevolence	_	_	34.864	_	.000
Political Orientation	.291	.085	1.058	15.807	.000
Know Someone with Mental Illness	.356	.126	1.393	8.143	.030
ADHD	.385	.148	1.167	4.264	.040
Social Restrictiveness	_	-	31.772	-	.000
Political Orientation	.331	.109	1.960	20.997	.000
ADHD	.415	.172	2.890	12.891	.000
Ideology	_	_	28.872	-	.000
Political Orientation	.246	.060	1.763	10.983	.002
ADHD	.334	.112	2.595	9.816	.014
Autism	.376	.142	2.676	5.910	.016

4. Discussion

The purpose of the present study was primarily to determine what demographic variables influenced preservice teachers' attitudes toward individuals with mental illness. Three groups of preservice teachers served as participants: general education majors, special education majors, and education minors. There were no significant differences between any of the three groups on the CAMI and its subscales. However, there were four demographic variables that contributed to participants' attitudes on the CAMI and its various subscales: political orientation, knowing someone with a mental illness, and believing ADHD and ASD were mental illnesses. Specifically, participants who endorsed a more liberal political philosophy and believed ADHD was a mental illness were less likely to view individuals with mental illness as an inferior group and also did not believe they were a threat to society. In addition, participants who endorsed the same two variables but also knew someone with a mental illness were likely to view those individuals in a sympathetic way. Finally, participants who also endorsed a more liberal political philosophy and viewed not only ADHD as a mental illness but also ASD valued the therapeutic benefit of community acceptance of de-institutionalized care.

The finding in the present study that political philosophy predicted attitudes toward individuals with mental illness is not new. About 40 years ago Tolor (1973) found that community attitudes toward individuals with mental illness were significantly related to political ideology. Others have also found that individuals with politically conservative beliefs are less tolerant toward individuals with mental illness (Tygart, 1992). Watson, Corrigan, and Angell (2005) used data from the MacArthur Mental Health Module contained in the 1996 General Social Survey (N = 1,444) to examine the impact of political ideology and attitudes toward individual with mental illness. They found out that conservative political ideology was related to attributing mental illnesses to individuals' bad character. Similar results have been found concerning individuals with disabilities. Specifically, preservice teachers who espoused a right-wing political philosophy and socially conservative beliefs held more negative attitudes toward individuals with disabilities than preservice teachers with more liberal leanings (Brandes & Crowson, 2009). Relatedly, Wiley and Siperstein (2011) investigated variables related to why students with emotional disturbance (ED) are under identified in special education. They found that states with high levels of political conservatism had distinctly lower ED identification rates and that per



pupil expenditure was not a statistically significant predictor.

Previous research has also found that individuals who know someone with a mental illness perceive them as less dangerous and desire less social distance from them than individuals who do not know someone with a mental illness (Corrigan, Backs, Green, Lickey, & Penn, 2001; Holmes et al., 1999; Vibha et al., 2008). Results of the present study corroborated this finding and extend it to preservice teachers who perceived individual with mental illness in a sympathetic way.

It is interesting to speculate why participants who endorsed a more liberal political philosophy were more likely to view both ADHD and ASD as mental illnesses while also valuing the therapeutic benefit of community acceptance of de-institutionalized care. Causal attributions for mental illness differs between conservatives and liberals. For example, Benforado and Hanson (2008) found that conservatives favor dispositional explanations (i.e., stable factors inherent within the individual) for various conditions such as poverty, substance abuse, mental illness while liberals endorse situational explanations (i.e., external and/or uncontrollable variables). In terms of mental illness, conservatives may view ADHD and ASD as due to motivational or behavioral factors where as liberals see the value in community programs for individuals who, by no fault of their own, are stricken with these mental illnesses.

Although much research exists on attitudes toward mental illness, particularly among mental health professionals, the current study was the first to examine attitudes of preservice versus practicing teachers who may be more amenable to changing negative attitudes than practicing teachers because the former are still in school while the possibility of being exposed to courses that could positively impact these attitudes exists. There are still many areas requiring future research. For example, previous researchers have found that participants with higher knowledge scores did not predict their attitudes toward individuals with mental illness (Addison & Thorpe, 2004; Bornstein, 1992). In the present study, participants who believed conditions such as ADHD and ASD were mental illnesses had more positive attitudes toward individuals with mental illness. Both ADHD and ASD appear in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition - Text Revision (DSM-IV-TR). Their endorsement as mental illnesses by some participants in the current study may indicate they had more knowledge than other participants and, contrary to previous research, more positive attitudes toward individuals with mental illness. Perhaps the inclusive emphasis of students with disabilities that all education majors receive in their training programs accounted for this departure from previous research. Many children with ADHD and ASD receive their education in mainstreamed classrooms (e.g., Crosland & Dunlap, 2012; Schnoes, Reid, Wagner, & Marder, 2006) and, consequently, preservice teachers are exposed to them during practicum experiences. Therefore, future research should examine how the relationship of exposure to students with mental health concerns in a school environment shapes teacher attitudes and behavior. Similarly, researchers should examine the extent to which coursework in mental illness effects the attitudes of pre-service teachers toward the mentally ill.

A final issue for future research is the relationship between attitudes and behaviors. Desforges et al. (1991) described how sometimes behaviors reflect attitude change and sometimes they do not reflect attitudes. For example, Borinstein (1992) found that positive attitudes toward individuals with mental illness did not necessarily decrease a public unwelcoming attitude toward mental health facilities in their communities. Given today's social climate of fear and physical violence related to mental illness, it is important to determine what types of attitudes lead to more positive behaviors toward individuals with mental illness.

References

- Algozzine, B., & McGee, J. R. (2011). Reported occurrence and perceptions of violence in middle and high schools. *The Clearing House*, *84*, 91-97.
- Benforado, A., & Hanson, J. (2008). The great attributional divide: How divergent views of human behavior are shaping legal policy. *Emory Law Journal*, *57*, 311-408.
- Borinstein, A. B. (1992). Public attitudes toward persons with mental illness. *Health Affairs*, 11, 186-196.
- Brandes, J. A., & Crowson, H. M. (2009). Predicting dispositions toward inclusion of students with disabilities: The role of conservative ideology and discomfort with disability. *Social Psychology of Education*, *12*, 271-289.
- Caldwell, T.M. & Jorm, A.F. (2000) Mental health nurses' beliefs about interventions for schizophrenia and depression: A comparison with psychiatrists and the public. *Australian & New Zealand Journal of Psychiatry*, 34, 602–611.
- Centers for Disease Control. (2010). Attitudes toward mental illness- 35 states, District of Columbia, and Puerto Rico, 2007. *Weekly*, 59(20), 619-625. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5920a3.htm
- Corrigan, P. W., Backs, A., Green, A., Licke, S. E., & Penn, D. L. (2001). Prejudice, social distance, and familiarity with severe mental illness. *Schizophrenia Bulletin*, 27, 219-225.
- Corrigan, P. W., Watson, A. C., Warpinski, A. C., & Garcia, G. (2004). Implications of educating the public on



- mental illness, violence, and stigma. Psychiatric Services, 55, 577-580.
- Crosland, K., & Dunlap, G. (2012). Effective strategies for the inclusion of children with autism in general education classrooms. *Behavior Modification*, *36*, 251-269.
- Desforges, D. M., Lord, ,C. G., Ramsey, S. L., Mason, J. A., Van Leeuwen, M. D., & West, S. C. (1991). Structured cooperative contact on changing negative attitudes toward stigmatized social groups. *Journal of Personality and Social Psychology*, 60, 531-544.
- Eisenbraun, K. D. (2007). Violence in schools: Prevalence, prediction, and prevention. *Aggression & Violent Behavior*, 12, 459-469.
- Forness, S. R., Freeman, S. F. N., Paparella, T., Kauffman, J. M., & Walker, H. M. (2012). Special education implications of point and cumulative prevalences for children with emotional or behavioral disorders. *Journal of Emotional and Behavioral Disorders*, 20, 4-18.
- Forness, S. R., & Kavale, K. A. (2001). Ignoring the odds: Hazards of not adding the new medical model to special education decisions. *Behavioral Disorders*, 26, 269-281
- Holmes, P., Corrigan, P., Williams, P., Canar, J., & Kubiak, M. (1999). Changing attitudes about schizophrenia. *Schizophrenia Bulletin*, *25*, 447-456.
- Kauffman, J. M., Mock, D. R., & Simpson, R. L. (2007). Problems related to underservice of students with emotional or behavioral disorders. *Behavioral Disorders*, 33, 43-57.
- Lauber, C., Anthony, M., Ajdacic-Gross, V. & Rossler, W. (2004) What about psychiatrists' attitude to mentally ill people? *European Psychiatry*, 19, 423–427.
- Maag, J.W. & Katsiyannis, A. (2010). School-based mental health services: Funding options and issues. *Journal of Disability Policy Studies*, 21(3), 173-180.
- Nordt, C., Rossler, W. & Lauber, C. (2006) Attitudes of mental health professionals toward people with schizophrenia and major depression. *Schizophrenia Bulletin*, 32(4), 709–714.
- Nordt, C., Rossler, W. & Lauber, C. (2006) Attitudes of mental health professionals toward people with schizophrenia and major depression. *Schizophrenia Bulletin*, 32(4), 709–714.
- Schnoes, C., Reid, R., Wagner, M., & Marder, C. (2006). ADHD among students receiving special education services: A national survey. *Exceptional Children*, 72, 483-496.
- Schomerus, G., Schwahn, C., Holzinder, A., Corrtigan, P. W., Grabe, H. J., Carta, M. G., & Angemeyer, M. C. (2012). Evolution of public attitudes about mental illness: A systemic review. *Acta Psychiatrica Scandinavica*, 125, 440-452.
- Taylor, S.M. & Dear, M.J. (1981). Scaling community attitudes toward the mentally ill. *Schizophrenia Bulletin*, 7(2), 225-240.
- Tolor, A. (1973). Opinions about mental illness and political ideology. *American Journal of Psychiatry*, 130, 1269-1272
- Tygart, C. E. (1992). Public acceptance/rejection of insanity-mental illness legal defenses fort defendants in criminal homicide cases. *Journal of Psychiatry & Law*, 20, 375-389.
- U.S. Department of Health and Human Services. (1999). *Mental Health: A report of the Surgeon General*. Rockville, MD: US. Department of Health and Human Services. Retrieved from http://www.surgeongeneral.gov/library/mentalhealth/home.html
- Vibha, P., Saddichha, S., & Kumar, R. (2008). Attitudes of ward attendants towards mental illness: Comparisons and predictors. *International Journal of Social Psychiatry*, *54*, 469-478.
- Watson, A.C., Corrigan, P. W., & Angell, B. (2005). What motivates public support for legally mandated mental health treatment? *Social Work Research*, *29*, 87-94.
- Wiley, A., & Siperstein, G. N. (2011). Seeing red, feeling blue: The impact of state political leaning on state identification rates for emotional disturbance. *Behavioral Disorders*, 36, 195-207.
- Yang, H. (1989) Attitudes towards psychoses and psychotic patients in Beijing. *International Journal of Social Psychiatry*, 35(2), 181–187.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: http://www.iiste.org

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: http://www.iiste.org/journals/ All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Academic conference: http://www.iiste.org/conference/upcoming-conferences-call-for-paper/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

























